

Abstract of the Disclosure

METHOD FOR FABRICATING CLOSE SPACED MIRROR ARRAYS

A method for fabricating close spaced mirror arrays on a semiconductor crystal substrate using a microelectro mechanical system (MEMS) technique where it is desired to form octagon or circular membranes in which the mirrors may be fabricated and steered for optical NXN switching. The method uses a 100 crystal plane substrate having a perpendicular 110 crystal plane. An etching mask with a layout of individual cross arms and a centered diamond is arranged with respect to their centers in a double triangle arrangement with the lines connecting the centers aligned at a 45 degree angle to the 110 crystal plane. This results in an almost double array density.